

AMENDMENTS TO THE CLAIMS

1. (Original) A method of diagnosing *Mycobacterium tuberculosis* infection in a human, or
of determining whether a human has been exposed to *Mycobacterium tuberculosis*,
comprising:
 - (i) contacting T-cells from said human with one or more of
 - (a) a peptide having the sequence shown in SEQ ID NO: 1;
 - (b) a peptide having or comprising the sequence of at least 8 consecutive amino acids of the sequence shown in SEQ ID NO: 1; or
 - (c) a peptide having or comprising a sequence which is capable of binding to a T-cell receptor which recognises a peptide as defined in (a) or (b);and
 - (ii) determining whether any of the said T-cells recognise said peptide,
wherein steps (i) and (ii) are optionally carried out *in vitro*.
2. (Original) A method of increasing the sensitivity of a diagnostic test for diagnosing *Mycobacterium tuberculosis* infection in a human, wherein said diagnostic test comprises contacting T cells from said human with a *Mycobacterium tuberculosis* antigen which is not Rv3879c, said method additionally comprising
 - (i) contacting T-cells from said human with one or more of
 - (a) a peptide having the sequence shown in SEQ ID NO: 1;
 - (b) a peptide having or comprising the sequence of at least 8 consecutive amino acids of the sequence shown in SEQ ID NO: 1; or
 - (c) a peptide having or comprising a sequence which is capable of binding to a T-cell receptor which recognises a peptide as defined in (a) or (b);and
 - (ii) determining whether any of the said T-cells recognise said peptide,
wherein steps (i) and (ii) are optionally carried out *in vitro*.
3. (Currently amended) A method according to claim 1 ~~or 2~~, wherein step (i) further comprises contacting said T-cells with one or more further *Mycobacterium*

tuberculosis T-cell antigen(s) or with an analogue(s) of said antigen(s) which is capable of binding to a T-cell receptor which recognises said antigen(s).

4. (Original) A method according to claim 3, wherein said one or more further T-cell antigens include antigens encoded by the RD-1 or RD-2 region, which antigens are preferably ESAT-6 and/or CFP10; or fragments thereof which are at least 8 amino acids long.
5. (Currently amended) A method according to ~~any one of claims 2 to 4~~, wherein said one or more further T-cell antigens include Rv3873, Rv3878 or Rv1989c; or fragments thereof which are at least 8 amino acids long.
6. (Currently amended) A method according to ~~any one of the preceding claims 1~~, wherein step (i) comprises contacting said sample of T-cells with two or more different peptides, each having the sequence of at least 8 consecutive amino acids of the sequence shown in SEQ ID NO: 1.
7. (Currently amended) A method according to ~~any one of the preceding claims 1~~ wherein peptides from, or analogues of, at least five different antigens are contacted with the T cells.
8. (Currently amended) A method according to ~~any one of the preceding claims 1~~ wherein one or more of the peptides
 - (i) represented by SEQ ID NO's 2 to 18, or
 - (ii) which bind to a T-cell which recognise (i), are contacted with the T cells.
9. (Currently amended) A method according to ~~any one of the preceding claims 1~~, wherein recognition of said peptide by said T-cells is determined by detecting the secretion of a cytokine from the T-cells.
10. (Original) A method according to claim 9, wherein the cytokine is IFN- γ .

11. (Currently amended) A method according to claim 9-~~or 10~~, wherein said cytokine is detected by allowing said cytokine to bind to an immobilised antibody specific to said cytokine and detecting the presence of the antibody/cytokine complex.
12. (Currently amended) A method according to ~~any one of the preceding claims 1~~, wherein said T-cells are freshly isolated *ex vivo* cells.
13. (Currently amended) A method according to ~~any one of claims 1 to 11~~, wherein said T-cells have been cultured *in vitro*.
14. (Canceled)
15. (Currently amended) A diagnostic composition comprising a peptide as defined in claim 1-~~or 8~~ and optionally one or more further *Mycobacterium tuberculosis* T-cell antigens.
16. (Original) A composition according to claim 15 wherein said one or more further T-cell antigens are selected from
 - (i) ESAT-6, CFP10, Rv3873, Rv3878, Rv1989c or fragment of any thereof which is at least 8 amino acids long; or
 - (ii) an analogue of (i) which binds to a T-cell which recognises (i).
17. (Currently amended) A kit for diagnosing *Mycobacterium tuberculosis* infection or exposure in a human, comprising one or more peptides as defined in claim 1 ~~or 8 or a composition according to claim 15 or 16~~, and optionally a means for detecting recognition of a peptide by T-cells.
18. (Original) A kit according to claim 17, wherein said means for detecting recognition of a peptide by T-cells comprises an antibody to a cytokine.
19. (Original) A kit according to claim 18, wherein said antibody is immobilised on a solid support and wherein said kit optionally comprises a means to detect an antibody/cytokine complex.

20. (Currently amended) A kit according to claim 18-~~or 19~~, wherein said cytokine is IFN- γ .
21. (Original) A method of ascertaining the stage of a *Mycobacterium tuberculosis* infection in a human comprising determining whether there is a differential T cell response to different antigens in the human.
22. (Original) A method according to claim 21 wherein T cell responses to one or more of Rv3879c, ESAT-6, CFP10, Rv3873, Rv3878, Rv1989c are measured.
23. (Currently amended) A method according to claim 21-~~or 22~~ which is carried out to
 - (i) to determine whether the infection is recent or longstanding, or
 - (ii) to determine whether the human is latently infected or has disease, or
 - (iii) to monitor the effect of treatment.